### INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA FOUR-PHASE OPERATION, FULLY-ACTUATED MODE, MD 414 (OXON HILL ROAD) AND NB I-95/I-495 OFF RAMP WILL OPERATE IN SEPARATE PHASES. AM EXCLUSIVE LEFT-TURN PHASE WILL BE PROVIDED FOR THE EASTBOUND MD 414 (OXON HILL ROAD) APPROACH. THE SOUTHBOUND RIGHT-TURN FROM THE NB I-95/I-495 OFF-RAMP WILL OPERATE CONCURRENTLY WITH THE EASTBOUND MD 414 (OXON HILL ROAD) LEFT-TURN PHASE. PEDESTRIAN SIGNALS WILL OPERATE CONCURRENTLY WITH THE WESTBOUND MD 414 (OXON HILL ROAD) PHASE.

#### CONTROLLER REQUIREMENTS

USE THE EXISTING FULL-TRAFFIC-ACTUATED. SOLID STATE EIGHT-PHASE CONTROLLER WITH TELEMETRY MODULE AND VIDEO TRAFFIC DETECTION SYSTEM HOUSED IN A NEMA SIZE '6' BASE MOUNTED CABINET.

# SPECIAL NOTE:

REMOVE LUMINAIRE AND LIGHTING ARM FROM TRAFFIC SIGNAL POLE LOCATED IN NORTHWEST CORNER OVER WESTBOUND MD 414 WHEN PROPOSED STREETLIGHTING ALONG THIS SECTION IS OPERATIONAL. COORDINATE WITH LIGHTING CONTRACTOR.

#### PROJECT CONTACTS

301-967-5805

THE CONTACT PERSONS FOR DISTRICT 3 ARE: MR. BRIAN YOUNG ASSISTANT DISTRICT ENGINEER - TRAFFIC 301-513-7358

MR. AUGUSTINE REBISH ASSISTANT DISTRICT ENGINEER - UTILITIES 301-513-7350

MR. WAYNE MOWDY ASSISTANT DISTRICT ENGINEER - MAINTENANCE 301-513-7304

410-787-7631

MR. ED RODENHIZER CHIEF. SIGNAL OPERATIONS

MR. EUGENE BAILEY

410-787-7676

THE POWER COMPANY REPRESENTATIVES ARE: MR. RICHARD CHILCOAT POTOMAC ELECTRIC POWER COMPANY - ELECTRIC SERVICE

MR. JOE NICE POTOMAC ELECTRIC POWER COMPANY - RELOCATIONS 202-388-2581

THE CONTACT PERSONS FOR THE OFFICE OF TRAFFIC AND SAFETY ARE: MR. RICHARD DAFF DIVISION CHIEF. TRAFFIC OPERATIONS 410-787-7630

MR. ROBERT SYNDER ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS

410-787-7652

TEAM LEADER SIGN OPERATIONS WIRING DIAGRAM --- D.F.J.K.M.L.P.Q.R.T.U.V.W NOT TO SCALE T.U.V.W ---D.F.J.L.P.Q. R.T.U.V.W -D.F.J.K.M.L.P.Q.R BB.D.F.J.P.Q.R.T.U

414 RUN

## WIRING LEGEND

P-2 CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.) L.M - 3 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) E.G.H.K - 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) D.F.J - 7 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) Q.R - VIDEO TRAFFIC DETECTION CONTROL CABLE (NO. 18 A.W.G.) BB - STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.) T.U.V.W - MICRO-LOOP LEAD IN CABLE  $-\dot{Q}$  - EXISTING GROUND ROD  $^{3}$  $_{4}$ " × 10"

NOTE: EXISTING WIRING NOT DETAILED SHALL REMAIN IN PLACE UNLESS OTHERWISED NOTED.

### EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE MDSHA.

| CODE   | QUANTITY | DESCRIPTION                                |  |  |  |  |  |  |
|--------|----------|--|--|--|--|--|--|--|
| 973023 | 19 SF    | SHEET ALUMINUM SIGNS CONSISTING OF:        |  |  |  |  |  |  |
|        |          | -2 EACH R3-5L (30"x36") - MAST ARM MOUNT   |  |  |  |  |  |  |
|        |          | -1 EACH R10-11b (24"x24") - MAST ARM MOUNT |  |  |  |  |  |  |

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

|   | CAT.   | ,        |    |  |  |  |  |  |  |  |
|---|--------|----------|----|--|--|--|--|--|--|--|
|   | CODE   | QUANTITY |    | DESCRIPTION  |  |  |  |  |  |  |
|   | 120500 | 1        | LS | MAINTENANCE OF TRAFFIC   |  |  |  |  |  |  |
|   | 585462 | 170      | LF | REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS - ANY WIDTH               |  |  |  |  |  |  |
|   | 585620 | 160      | LF | 12 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS |  |  |  |  |  |  |
|   | 585624 | 65       | LF | 24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS |  |  |  |  |  |  |
|   | 801607 | 19       | SF | INSTALL SHEET ALUMINUM SIGN  |  |  |  |  |  |  |
|   | 802501 | 170      | LF | NO. 6 AWG STRANDED BARE COPPER GROUND WIRE                                     |  |  |  |  |  |  |
|   | 805118 | 110      | LF | 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-BORED                                     |  |  |  |  |  |  |
|   | 805135 | 350      | LF | 3 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED                                  |  |  |  |  |  |  |
|   | 805160 | 15       | LF | 1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE          |  |  |  |  |  |  |
|   | 810550 | 4        | EA | MIRCOLOOP PROBE, 500 FOOT LEAD IN CABLE  |  |  |  |  |  |  |
|   | 811001 | 2        | EA | FURNISH AND INSTALL ELECTRICAL HANDHOLE  |  |  |  |  |  |  |
|   | 860265 | . 18     | EA | RELOCATE EXISTING SIGNAL HEAD SECTIONS   |  |  |  |  |  |  |
| , | 860272 | 6        | EA | 12 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION                                  |  |  |  |  |  |  |
|   | 860278 | 2        | EA | 12 PEDESTRIAN SIGNAL HEAD SECTION POLE MOUNT                                   |  |  |  |  |  |  |
|   | 861106 | 250      | LF | ELECTRICAL CABLE - 3 CONDUCTOR (NO. 14 AWG)                                    |  |  |  |  |  |  |
|   | 861107 | 50       | LF | ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)                                    |  |  |  |  |  |  |
|   | 861116 | 250      | LF | ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG)                                    |  |  |  |  |  |  |
|   | 861108 | 800      | LF | ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)                                    |  |  |  |  |  |  |
|   | 862102 | 225      | LF | SAW CUT FOR SIGNAL (LOOP DETECTOR)   |  |  |  |  |  |  |
|   | 800000 | 1        | LS | REMOVE AND DISPOSE OF EXISTING MATERIALS AND EQUIPMENT                         |  |  |  |  |  |  |
|   | 818010 | 1        | EA | 14 FOOT BREAKAWAY PEDESTAL POLE  |  |  |  |  |  |  |
|   | 800000 | 2        | EA | VIDEO TRAFFIC DETECTION CONTROL CABLE 300 FEET                                 |  |  |  |  |  |  |
|   |        |          |    |  |  |  |  |  |  |  |

C. ALL REMOVED SIGNAL MATERIALS ARE TO BECOME THE PROPERTY OF THE CONTRACTOR. NOTE: NO EQUIPMENT IS TO BE RETURNED TO MDSHA. ALL MATERIALS TO BE REMOVED BY THE CONTRACTOR BECOME THE PROPERTY OF THE CONTRACTOR.

## PHASE CHART

|   |              | 1                 | 2                 | 3                 | 4     | 5     | 6    | 7      | 8       | 9       | 10               | 11       | 12       |            |  |
|---|--------------|-------------------|-------------------|-------------------|-------|-------|------|--------|---------|---------|------------------|----------|----------|------------|--|
| _ |              | <b>(C)</b>        | <b>(0.3.0</b> )   | <b>(C)</b>        | ® > 0 | ® 200 | @S@  | (C)(S) | ®30     | (C)(S)  |                  | *        | **       |            |  |
|   | PHASE 1 & 6  | <b>4</b> -G-      | <b>4</b> -G-      | <b>∢</b> -G-      | G     | G     | R    | R      | R       | R       | R<br>-G <b>→</b> | DW       | DW       | <b>4</b> 4 |  |
|   | 1 CHANGE     | <b>◆</b> Y-       | <b>◆</b> Y-       | <b>◆</b> Y-       | G     | G     | R    | R      | R       | R       | R Y              | DW       | DW       | <u> </u>   |  |
|   | PHASE 2 & 6  | <b>◆</b> R-       | <b>4</b> R        | <b>∢</b> R–       | G     | G     | G    | G      | R       | R       | R                | W        | W        |            |  |
|   | PED CLEAR    | <b>∢</b> R−       | <b>◆</b> R-       | <b>◆</b> R–       | G     | G     | G    | G      | R       | R       | R                | FL<br>DW | FL<br>DW | ⊸ J        |  |
|   | 2 & 6 CHANGE | <b>◆</b> R        | <b>∢</b> R−       | <b>∢</b> R−       | Υ     | Υ     | Υ    | Υ      | R       | R       | Ř                | DW       | DW       | <b></b> ▶  |  |
|   | PHASE 4      | <b>∢</b> R−       | <b>◆</b> R-       | <b>∢</b> R-       | R     | R     | R    | R      | G       | G       | G                | DW       | DW       | <b>↓</b> ↓ |  |
|   | 4 CHANGE     | <b>∢</b> R-       | <b>∢</b> R−       | <b>∢</b> R-       | R     | R     | R    | R      | Y       | Υ       | Y                | DW       | DW       | <b>1</b>   |  |
|   | FLASHING     | FL<br><b>◆</b> R− | FL<br><b>◆</b> R- | FL<br><b>∢</b> R− | FL Y  | FL /  | FL / | FL/Y   | FL<br>R | FL<br>R | FL R             | DARK     | DARK     | <b>+</b>   |  |

GREEN LINE NO. I JUNE 29, 2007

ADDENDUM NO. 4
MARCH 10, 2005
SHEET REPLACED

SP-14 OF SP-23

SHEET NO.

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION



SCALE:

DATE:

Office of Traffic & Safety

TRAFFIC ENGINEERING DESIGN DIVISION

GENERAL INFORMATION SHEET MD 414 OXON HILL ROAD AT NB I-95 ON/OFF RAMP (RAMP F-1 AND G)

SEE TITLE SHEET DRAWN BY: M. PIERRE F.A.P. NO.

21030-1888

10 NORTH PARK DRIVE HUNT VALLEY, MARYLAND CHECKED BY: J. LAWRENCE (410) 316-7800

4135A-GI PG5075173 S.H.A. NO. PRINCE GEORGE'S COUNTY: T.I.M.S. NO. 294 of 402 16041400.16 LOG MILE: